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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,191	05/24/2001	Henri-Georges Bois	03715.0080	5212

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Finnegan Henderson Farabow
Garrett & Dunner
1300 I Street NW
Washington, DC 20005

EXAMINER

HUYNH, LOUIS K

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,191

Applicant(s)

BOIS, HENRI-GEORGES

Examiner

Louis K. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7,9-20,22-24 and 26-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7,9-20,22-24 and 26-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, 19, 26-28, 30 and 32 are objected to because of the following informalities:
“heat-sealed jaws” (various places in the claims) should be changed to: --heat-sealing jaws--.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1, 2, 4,6, 7, 9-20, 22-24 and 26-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 6-7: “at least one sensor ... the position of the tape” renders the claim indefinite because there is no structural/functional relationship between the sensor and the means suitable to reposition the film. Note that the at least one sensor is for detecting the presence of the tape in a predetermined position, it does not detect the position of the tape; therefore, the means suitable to reposition the film could not reposition the film when the sensor detects that the tape is not present.

Claim 4 is confusing because the sensor must detect the presence of the closure tape and thus it should be stationary instead of being dependent upon the motion of the heat-sealing jaws.

Claim 11 is indefinite for it is unclear what other type of the closure tape that comprises the group of closure tape.

Claim 19, lines 4-7: “detecting the presence ... the position of the tape” renders the claim indefinite because there is no structural/functional relationship between the step of detecting and the step of repositioning. Note that the at least one sensor is for detecting the presence of the tape, it does not detect the position of the tape; therefore, the step of repositioning the film could not be performed when the sensor detects that the tape is not present.

Claim 26, lines 4-10: “at least one sensor ... the position of the tape” renders the claim indefinite because there is no structural/functional relationship between the sensor and the means suitable to reposition the film. Note that the at least one sensor is for detecting the thickness corresponding to the presence of the tape, it does not detect the position of the tape; therefore, the means suitable to reposition the film could not reposition the film when the sensor detects that the tape is not present. Furthermore, there is no structural/functional relationship between the means suitable to reposition the film and the signals generated by the sensor. Note that in order for a mechanical means to respond to signal generated by a sensor, the sensor must first be interfaced with a control means for interpreting the signal and for issuing proper commands to the mechanical means with respect to a predetermined set of values and/or variables stored in the control means.

Claims 27, 28, 30 and 32 each lack the structural/functional relationships between the sensor(s) and the heat-sealed jaws.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 6, 7, 10, 11, 13, 14, 16, 19-20 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ausnit (US 4,876,842).

With respect to claim 1, Ausnit discloses a form-fill-seal machine for forming reclosable bag from a continuously traveling film (13) having fastener strip (17) fitted thereon. The form-fill-seal machine of Ausnit includes a set of transverse heat sealer jaws (44), and at least one sensor (25 or 31) connected to a control (32); wherein the control (32) controls the operation of the form-fill-seal machine (column 3, lines 58-68); and wherein the sensor (31) detecting the presence of the fastener strip (17) by feeling index spots (28) provided on the flange (20a) of the fastener strip (17).

With respect to claim 2, the sensor (31) comprises a finger (30) associated with a microswitch sensor.

With respect to claim 6, the form-fill-seal machine of Ausnit includes guiding device (38) for shaping the film (13) into tubular blank and conveyor for filling the tubular bag blank with product (15).

With respect to claim 7, the form-fill-seal machine of Ausnit includes heat seal bars (42) for fixing the fastener strip (17) to the film (13).

With respect to claim 10, the form-fill-seal machine of Ausnit is a horizontal form-fill-seal machine wherein the film (13) travels horizontally.

With respect to claim 11, the fastener strip (17) used in the form-fill-seal machine of Ausnit is a complementary closure strips.

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With respect to claim 13, the sensor (31) detects the presence of the closure strip and the proper feeding of the closure strips in both transverse and longitudinal direction of the film (column 3, lines 31-37).

With respect to claims 14 and 16, the form-fill-seal machine of Ausnit includes dual sensor (25) for detecting the fastener strip (17) that are juxtaposed and parallel in the longitudinal travel direction of the film (13).

With respect to claims 19 and 20, Ausnit discloses a method of forming reclosable bag from a continuously traveling film (13) having fastener strip (17) fitted thereon. The method of Ausnit includes the steps of: cyclically sealing the film (13) using a set of transverse heat sealer jaws (44), detecting the presence of the fastener strips (13 using at least one sensor (25 or 31) connected to a control (32); and controlling the operation of the form-fill-seal machine via the control (32) (column 3, lines 58-68); wherein the sensor (31) detects the presence of the fastener strip (17) by feeling index spots (28) provided on the flange (20a) of the fastener strip (17).

With respect to claim 27, Ausnit discloses a form-fill-seal machine for forming reclosable bag from a continuously traveling film (13) having fastener strip (17) fitted thereon. The form-fill-seal machine of Ausnit includes a set of transverse heat sealer jaws (44), and at least one sensor (31) connected to a control (32); wherein the sensor (31) having finger (30) connected to an electrical sensor for detecting the presence of the fastener strip (17) in a predetermined position by feeling index spots (28) provided on the flange (20a) of the fastener strip (17).

6. Claims 1, 6, 9-14, 16 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Talbott et al. (US 4,745,731).

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With respect to claims 1, 12, 19 and 20, Talbott discloses a form-fill-seal machine and a method for forming bags from a continuous film (18) having closure strips (22, 23) fitted on the film (18) wherein the presence of the closure strips in a predetermined position is sensed by sensors (21) so that the film and the closure strips are precisely aligned when they engage the form-fill-seal machine (column 3, lines 50-64), and by detector (35) so that appropriate measure can be taken when the closure strips are not properly engaged (column 4, lines 57-68), and the formed bag is transversely sealed by sealing jaws (48 & 49).

With respect to claim 6, the form-fill-seal machine (13) includes means (28, 29) for shaping the film into a tubular state, means (24) for filling the tubular bag blank and means (14) for closing the bag.

With respect to claims 9 and 10, the apparatus of Talbott includes feed rollers for causing the film to travel horizontally and vertically (Figure 1).

With respect to claim 11, the closure strips (22, 23) used in the form-fill-seal machine of Talbott are complementary closure strips.

With respect to claim 13, the sensors (21) detects the presence of the closure strips (inherent) and the proper feeding of the closure strips in both transverse and longitudinal direction of the film.

With respect to claims 14 and 16, the apparatus of Talbott includes dual sensors (21) for detecting the closure strips (22, 23) that are juxtaposed in the longitudinal travel direction of the film.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 15, 17, 18 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausnit (US 4,876,842) or over Talbott (US 4,745,731).

With respect to claim 4, the location of the sensor is obvious as a matter of engineering design choice since it does not solve any stated problem insofar as the record is concerned and thus does not patentably distinguish the claimed invention over the applied prior art.

With respect to claims 15, 17, 18 and 22-24, the orientation of the closure strip and/or the sensors with respect to the travel direction of the film strips and the specific type of closure tape are obvious to an ordinary skilled person in the art as a matter of engineering choice since it does not solve any stated problem insofar as the record is concerned and thus does not patentably distinguish the claimed invention over the applied prior art. Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the apparatus of Ausnit by having provided sensors that are suitable for detecting the presence of the fastener strips in according to the orientation of the fastener strips with respect to the travel direction of the film.

9. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ausnit (US 4,876,842) in view of PAJ (Patent abstract of Japan 11165362).

Ausnit discloses a form-fill-seal machine for forming reclosable bag from a continuously traveling film (13) having fastener strip (17) fitted thereon. The form-fill-seal machine of Ausnit includes a set of transverse heat sealer jaws (44), and at least one sensor (25 or 31) connected to a control (32); wherein the sensor (31) detecting the presence of the fastener strip (17) in a predetermined position by feeling index spots (28) provided on the flange (20a) of the fastener strip (17). The form-fill-seal machine of Ausnit meets all of applicant's claimed subject matter but lacks the specific teaching of the sensor detecting the presence of the closure strip by detecting the thickness of the closure strip.

However, PAJ discloses a form-fill-seal machine (13) for forming bags from a continuous cylindrical film (51) having fasteners (52,53) fitted thereon, wherein the presence of the fasteners (52, 53) on the film (51) are sensed by a detector (11) having a contact (11d) for feeling the thickness level of the fasteners (52, 53) intermeshing with each other (Solution).

Therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the Form-fill-seal machine of Ausnit by having positioned the sensor (31) to feel the thickness of the fastener strip, as taught by PAJ, in order to detect the presence of the fastener strip in a predetermined position. Note that the sensor (31) is a microswitch that generates proper signals as the finger (30) feels the thickness of the fastener strip.

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10. Claims 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausnit (US 4,876,842) in view of Talbott (US 4,745,731).

Ausnit discloses a form-fill-seal machine for forming reclosable bag from a continuously traveling film (13) having fastener strip (17) fitted thereon. The form-fill-seal machine of Ausnit includes a set of transverse heat sealer jaws (44), and at least one sensor (31) connected to a control (32); wherein the sensor (31) having finger (30) connected to an electrical sensor for detecting the presence of the fastener strip (17) in a predetermined position by feeling index spots (28) provided on the flange (20a) of the fastener strip (17). The form-fill-seal machine of Ausnit meets all of applicant's claimed subject matter but lacks the specific teaching of a dual mechanical feelers that are juxtaposed in the longitudinal direction of the film.

However, Talbott discloses a form-fill-seal machine for forming bags from a continuous film (18) having closure strips (22, 23) fitted on both edges of the film (18) wherein the presence of the closure strips in a predetermined position is sensed by dual sensors (21) so that the film and the closure strips are precisely aligned when they engage the form-fill-seal machine (column 3, lines 50-64).

Therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the Form-fill-seal machine of Ausnit by having provided dual sensors, as taught by Talbott, in order to detect the present of fastener strips arranged on both edges of the film.

With respect to claims 30 and 32, the orientation of the sensors with respect to the travel direction of the film strips is obvious to an ordinary skilled person in the art as a matter of engineering choice since it does not solve any stated problem insofar as the record is concerned

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and thus does not patentably distinguish the claimed invention over the applied prior art.

Therefore, it would have been obvious to a person with an ordinary skill in the art, at the time the invention was made, to have modified the apparatus of Ausnit by having arranged the sensors in such a way that they would be capable of detecting the presence of the fastener strips in according to the orientation of the fastener strips with respect to the travel direction of the film.

Response to Arguments

11. Applicant's arguments with respect to claims 1 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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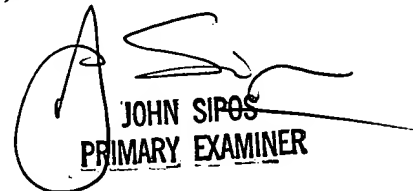
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is (703) 306-5694.

The examiner can normally be reached on M-F from 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (703) 308-2187. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

LH
August 25, 2003


JOHN SIPOS
PRIMARY EXAMINER